

Title (en)  
HYBRID VEHICLE CONTROL APPARATUS

Title (de)  
STEUERUNGSVORRICHTUNG FÜR EIN HYBRIDFAHRZEUG

Title (fr)  
DISPOSITIF DE COMMANDE POUR VÉHICULE HYBRIDE

Publication  
**EP 2765044 B1 20191127 (EN)**

Application  
**EP 11868859 A 20111003**

Priority  
JP 2011072810 W 20111003

Abstract (en)  
[origin: US2014200111A1] A hybrid vehicle control apparatus (100) is provided with: a first replacement controlling device which replaces regenerative braking torque of the rotating electrical machine by engagement torque of the clutch if probability of starting an internal combustion engine is high on demand of changing a connection state between a rotating electrical machine and a transmission mechanism in regenerative braking by the regenerative braking torque of the rotating electrical machine; and a second replacement controlling device which replaces the regenerative braking torque by friction braking torque if the start probability is low on the change demand.

IPC 8 full level  
**B60L 7/22** (2006.01); **B60K 6/48** (2007.10); **B60K 6/547** (2007.10); **B60L 15/20** (2006.01); **B60W 10/02** (2006.01); **B60W 10/06** (2006.01); **B60W 10/10** (2012.01); **B60W 10/11** (2012.01); **B60W 10/113** (2012.01); **B60W 10/18** (2012.01); **B60W 10/184** (2012.01); **B60W 20/00** (2016.01); **B60W 20/10** (2016.01); **B60W 20/14** (2016.01); **B60W 20/30** (2016.01); **B60W 20/40** (2016.01); **B60W 30/18** (2012.01); **B60W 30/19** (2012.01); **F02D 29/02** (2006.01)

CPC (source: CN EP US)  
**B60K 6/48** (2013.01 - CN EP US); **B60K 6/547** (2013.01 - CN EP US); **B60L 7/22** (2013.01 - EP US); **B60L 15/2054** (2013.01 - EP US); **B60W 10/02** (2013.01 - CN EP US); **B60W 10/06** (2013.01 - CN EP US); **B60W 10/10** (2013.01 - US); **B60W 10/11** (2013.01 - CN EP US); **B60W 10/113** (2013.01 - CN EP US); **B60W 10/18** (2013.01 - US); **B60W 10/184** (2013.01 - EP US); **B60W 20/00** (2013.01 - US); **B60W 20/10** (2013.01 - EP US); **B60W 20/14** (2016.01 - CN EP US); **B60W 20/30** (2013.01 - EP US); **B60W 20/40** (2013.01 - CN EP US); **B60W 30/18127** (2013.01 - CN EP US); **B60W 30/19** (2013.01 - CN EP US); **F02D 29/02** (2013.01 - CN EP US); **F02N 11/0833** (2013.01 - EP US); **F02N 11/084** (2013.01 - CN US); **F02N 11/0844** (2013.01 - CN US); **F02N 15/022** (2013.01 - EP US); **B60L 2240/423** (2013.01 - EP US); **B60L 2240/443** (2013.01 - EP US); **B60L 2240/507** (2013.01 - EP US); **B60L 2250/26** (2013.01 - EP US); **B60L 2260/26** (2013.01 - EP US); **B60W 2510/0275** (2013.01 - CN EP US); **B60W 2510/1005** (2013.01 - CN EP US); **B60W 2710/1005** (2013.01 - EP US); **F02N 11/04** (2013.01 - CN EP US); **F02N 2300/2006** (2013.01 - EP US); **Y02T 10/40** (2013.01 - CN EP US); **Y02T 10/62** (2013.01 - CN EP US); **Y02T 10/64** (2013.01 - EP US); **Y02T 10/72** (2013.01 - EP US); **Y10S 903/93** (2013.01 - CN EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 2014200111 A1 20140717**; **US 9017214 B2 20150428**; CN 103958311 A 20140730; CN 103958311 B 20170215; EP 2765044 A1 20140813; EP 2765044 A4 20160720; EP 2765044 B1 20191127; JP 5392422 B2 20140122; JP WO2013051093 A1 20150330; WO 2013051093 A1 20130411

DOCDB simple family (application)  
**US 201113807975 A 20111003**; CN 201180034223 A 20111003; EP 11868859 A 20111003; JP 2011072810 W 20111003; JP 2012554114 A 20111003